

BIDDER _____

BID SECURITY _____

CITY OF NEWARK
Delaware

CONTRACT NO. 16-03

PURCHASE OF ONE NEW 55' AERIAL LIFT,
UTILITY BODY AND CHASSIS

NOTICE

Do not disassemble. Return intact with
properly completed forms or bid may be rejected.

CITY OF NEWARK
Delaware

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TABLE OF CONTENTS

NOTICE OF LETTING.	1
GENERAL PROVISIONS	2
TECHNICAL SPECIFICATIONS	9
BIDDER'S PROPOSED SPECIFICATIONS	30
PROPOSAL	32
BOND TO ACCOMPANY PROPOSAL	34

CITY OF NEWARK
Delaware

CONTRACT NO. 16-03

PURCHASE OF ONE NEW 55' AERIAL LIFT,

UTILITY BODY AND CHASSIS

NOTICE OF LETTING

Sealed proposals for Contract No. 16-03, Purchase Of One New 55' Aerial Lift, Utility Body and Chassis will be received in the Purchasing Office, Newark Municipal Building, 220 S. Main Street, Newark, Delaware, 19711 until 2 p.m., prevailing time, Tuesday, February 16, 2016, and will be publicly opened and read aloud in the Council Chamber shortly thereafter.

Copies of the contract documents may be obtained on the City's website at www.cityofnewarkde.us.

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CONTRACT NO. 16-03

PURCHASE OF ONE NEW 55' AERIAL LIFT,

UTILITY BODY AND CHASSIS

GENERAL PROVISIONS

1. BIDS

Each bid shall be submitted on the proposal form included herein. The proposal and all other required documents must be submitted in a sealed envelope clearly identified with the bidder's name and marked, "City of Newark - Contract No. 16-03, "Purchase Of One New 55' Aerial Lift, Utility Body and Chassis," and will be received in the Purchasing Office, 220 S. Main Street, Newark, Delaware, 19711, until 2 p.m., prevailing time, Tuesday, February 16, 2016. Each bid so submitted shall constitute an irrevocable offer for a period of sixty (60) days following the bid opening date.

2. PRICES AND EXCEPTIONS

The prices shall include all transportation, delivery preparation, and installation charges for the equipment specified. The bid prices shall be F.O.B. Newark Maintenance Garage at the end of Phillips Avenue, Newark, Delaware and shall not include federal or state taxes. If applicable, the successful bidder/vendor must furnish the City with the necessary tax exception forms in triplicate upon submission of his invoice.

3. BID SECURITY

No bid will be considered unless accompanied by a cashier's check, certified check or bid bond in the amount of five percent (5%) of the total proposal, payable to the City of Newark. If a bid bond is submitted, it must be made out on the attached "Bond to Accompany Proposal" form and issued by a surety licensed to conduct business in the State of Delaware. The successful bidder/vendor, upon his failure or refusal to execute and deliver the contract and surety bond within ten days (10) days after he has received notice of the acceptance of his bid, shall forfeit to the City for such failure or refusal the security deposited with his bid.

4. AWARDS

Following a review of all bids by the City Manager and his recommendation to the Mayor and Council, awards, if any, will be made to the best responsible bidder. The Mayor and Council reserve the right to reject any or all bids and to waive minor irregularities and defects in form where the best interests of the City would be served.

5. TRADE - IN

- a. A bidder/vendor bidding on the contract shall submit a quotation on the trade-in vehicle listed in the proposal. The City of Newark reserves the right to trade or not to trade the vehicle for which such quote is submitted. The vehicle that is traded shall be traded in "as is" condition at the time of acceptance of the new vehicle, provided, however, that all equipment which was not original equipment on the vehicle when it was purchased by the City shall be removed by the City prior to trade-in; i.e., radios, etc., unless otherwise noted in the specifications.
- b. Bidders are cautioned not to submit unbalanced proposals by overpricing the new vehicle or the trade-in allowance. The City may decide to purchase the new vehicle without a trade-in. The successful bidder will be notified whether or not there will be a trade-in at the time of award.
- c. To arrange an appointment to examine the trade-in vehicle please call Rick Vitelli at 302-366-7000 x 2080.

6. CONTRACT SURETY BOND

Within ten (10) days of the award of the contract, the City shall require a surety bond satisfactory to the City in the full amount of the bid price from the successful bidder/vendor.

7. DAMAGES FOR LATE DELIVERY

Delivery shall be F.O.B. Newark, Delaware. The date of delivery of the equipment is important and may influence the award of the contract. The submitted delivery period shall be calculated from the date of notification of award. Liquidated damages of twenty-five dollars (\$25.00) shall be assessed by the City for every day the contract is extended

beyond the submitted delivery period. Liquidated damages are not to be construed as a penalty in any sense.

8. FINAL INSPECTION

All equipment will be subject to final inspection. If in any way an item fails to meet the terms of the contract, it may be rejected or liquidated damages charges made. The decision of the City will be final and any rejected item or materials will have to be replaced at the expense of the bidder/vendor.

9. INTENT OF SPECIFICATIONS

It shall be the bidder/vendor's responsibility to furnish the equipment specifically indicated in the specifications and such other as may be necessary to provide the operation intended by the City. Whether or not they are specifically enumerated in the specifications, all parts necessary to provide a complete and efficient vehicle shall be included in the bid. The bidder/vendor shall bear the entire responsibility for furnishing all the specified equipment (including that for which he may not be a dealer) in complete accordance with all the terms and conditions, including delivery, listed in this contract.

10. EXCEPTIONS

Any and all exceptions which are taken to the specifications shall be noted in the space provided in each part. All vehicles must meet all applicable federal and state regulations.

11. EQUALS

Where a specific product is specified by catalog or model number, the acceptability of any other "or equal" product shall be subject to the sole judgement of the City of Newark.

12. WARRANTIES AND STANDARDS

The vehicle will be unused in all component parts, including all accessories. The specifications will be construed as the minimum required. When the manufacturer's standard exceeds these, the standard units will be furnished. All materials will be free of defects. All standard manufacturer's warranties and guarantees shall apply. Bidders must enclose a copy of the warranty policy with the bid proposal. All terms of the warranty policy as submitted shall be applicable to any vehicle purchased under this contract.

13. WORKMANSHIP

Workmanship will conform to the best current manufacturing practice followed for vehicles of the type. Component parts and units will be manufactured to definite standard dimensions with proper fits and clearances. The vehicle will be ready for use, including all lubricants, coolants and operating fluids required.

14. ADVERTISEMENTS

It is further agreed that any bidder/vendor submitting a bid will not use the name of the City in any advertisement without first obtaining the written consent of the City Manager.

15. EEO AND DELAWARE BUSINESS LICENSE

The bidder/vendor shall be licensed to do business in the State of Delaware and also be a fair and equal opportunity employer.

16. NON COLLUSION

The bidder/vendor shall not, either directly or indirectly, enter into any agreement, participate in any collusion, or otherwise take any action in restraint of free competitive bidding in connection with the contract.

17. ADDENDA AND QUESTIONS

Any changes to the contract documents shall be made by written addenda issued no later than four (4) days prior to the bid opening date. Bidder/vendors shall bear the entire responsibility for being sure they have received all such addenda.

Any questions regarding the bidding process shall be directed to Ms. Cenise Wright, Purchasing Administrator, at 302-366-7000.

Any questions regarding the specifications should be directed to Mr. Rick Vitelli, Electrical Director, at 302-366-7000 x 2080.

18. MANUALS/CD/DVD/KEYS

The bidder shall supply one (1) complete set of shop repair manuals, maintenance manuals, trouble shooting manuals,

emission manuals, engine diagnostic manuals, and transmission repair and overhaul manuals.

The bidder shall supply one (1) set of parts manuals and electrical schematics with wiring diagrams for both chassis and body assemblies and subassemblies.

The successful bidder will also furnish engine software which will permit testing and diagnostic as well as adding/deleting and editing various parameters outside of manufacturers specific limits.

The bidder shall supply one (1) set of body builder software.

Five (5) sets of keys shall also be furnished for each vehicle.

19. PAYMENT

No invoices will be processed for payment until the new vehicle is delivered and verification is made that all specifications under this contract have been met.

20. COMPLIANCE WITH SPECIFICATIONS

Any equipment bid must meet or be equal to these specifications. Any deviation from these specifications must be explained in full detail, including drawings, and engineering explanation. Bid must be in strict compliance with the specifications, and offer the same or equal equipment. Exceptions are to be listed separately in a letter, which will become a part of your proposal, otherwise, it is fully understood that the equipment offered is exactly as specified.

21. PARTS AND SERVICE

Bidder to indicate nearest service center to the City for parts and service. Bidder should have a parts distributor and repair facility for parts supply and repair work within sixty (60) miles of the City of Newark. During warranty period of complete unit bidder will provide road service at no cost to the City of Newark or assume transport costs to their repair facility in the event road service is not available.

22. USE OF OTHER NAMES AND REFERENCES

Unless otherwise stated, the use of the manufacturer's name

and product are for descriptive purposes, and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items as stated.

23. BROCHURES AND LITERATURE

Proposal must be accompanied by descriptive literature - marked, and indicating the exact items to be furnished. The terms "as specified" will not be acceptable.

24. FIRST MAINTENANCE REQUIREMENT KIT

A complete set of fuel, oil, hydraulic and air filters with clearly defined manufacturer's part numbers will be furnished for both chassis and body.

25. FACTORY SERVICE TRAINING

The successful bidder will provide two (2) days of Cummins Insite Training at Bristol PA., location for two (2) maintenance technicians. Contact information for training is Ashten N. Nastelli, 717-307-2334 or ashten.nastelli@cummins.com

The successful bidder will provide two (2) days of factory training for two (2) maintenance technicians on the repairing and maintenance of the boom, hydraulics, and safety systems for the body. Any travel, room and board costs shall be included with this training for the body.

26. WARRANTIES

WARRANTIES - All units delivered must be guaranteed to be free from defects in materials, design and workmanship for two (2) years with unlimited miles and hours from date of final delivery excluding normal wear items.

ENGINE - Seven (7) years with 150,000 miles and 6,000 hours on engine and engine electronics. Example (injectors, control system, internally lubricated parts, fuel pump, turbo charger, 100% parts and labor.

TRANSMISSION WARRANTY - Five (5) years unlimited mileage and hours. 100% parts and labor.

RUST THROUGH WARRANTY ON CAB STRUCTURE - Five (5) years unlimited miles and hours.

FRAME RAILS - Seven (7) year warranty including cross members, brackets and side members.

27. INDEMNIFICATION

The contractor shall solely be responsible and liable for the accuracy and completeness of all work performed and shall agree to indemnify, defend and hold harmless the City of Newark, its officers, agents and employees, from and against any and all claims, actions, suits and proceedings arising out of, based upon or caused by negligent acts, omissions or errors of or the infringement of any copyright of patent by the contractor, its officers, agents, employees or subcontractors, in the performance of the contracted agreement.

28. TERMINATION OF AGREEMENT

This agreement may be terminated by the City upon thirty (30) days written notice if the contractor fails to perform satisfactorily in accordance with the terms and conditions of the contract. In the event this agreement is terminated, the contractor shall be paid for services satisfactorily rendered up to the termination date.

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PURCHASE OF ONE NEW 55' AERIAL LIFT,

UTILITY BODY AND CHASSIS

TECHNICAL SPECIFICATIONS

It is the intent of the following specifications to set up minimum requirements for a 55 foot, 60 foot working height, articulating, insulated aerial tower, with two-man basket as manufactured by Versalift. These specifications are to be considered minimum. If it is necessary to bid alternate equipment or to take exceptions to the specifications as set forth, this must be so stated in the bid. Any reference to a model or brand name is only to denote quality, and does not mean that equal equipment will not be considered. This unit must be tested to meet OSHA and **A92.2 2015** standards and all pertinent FMVSS safety standards.

1.	<u>GENERAL SPECIFICATIONS</u>	<u>PLEASE STATE</u>
	Height to bottom of basket	55 feet _____
	Working height	60 feet _____
	Rated capacity of bucket	700 lbs. _____
	Horizontal side reach	36ft., 2 in. _____
	Overall stowed height	12 feet _____
	Stability test, horizontally extended; level ground	1050 lbs. _____
	5 degree slope	931 lbs. _____
	Upper boom insulation gap	239 inches _____
	Lower boom insulation gap	24 inches _____
	Maximum level of deflection per foot of the upper fiberglass boom at rated platform capacity	_____

Aerial device metal components shall be shot blasted to provide clean "white metal" for primer adhesion, primed and painted.

Completed unit shall be capable of passing OSHA stabilization tests with outrigger assembly.

Device shall be equipped with two sets of full A-frame outriggers.

Aerial device shall be manufactured in an ISO9001 certified facility.

2. PLATFORM

Fiberglass platform is a closed 24" x 42" x 42" with two molded exterior steps for ease of access/exit of platform. Steps shall be to the curbside when booms are stowed. Platform is to be end mounted and have a capacity of 700 pounds.

Platform leveling is achieved automatically through a completely enclosed parallelogram system. The major components of this system include several 3/4" diameter fiberglass leveling rods and ANSI No. 100 roller chain and various idlers. **There are no cables used in this system.** The fiberglass leveling rods maintain the insulation gaps in all boom positions and are 100% tested at twice the rated load. The tension is adjusted by means of a threaded rod at the knuckle and platform leveling is adjusted by another threaded rod at the turret.

STATE ALL EXCEPTIONS: _____

3. LOWER BOOM

The lower boom is a high strength rectangular steel tube 10" x 13" for maximum strength and rigidity. The lower boom cylinder anchors located on the lower boom are reinforced for extra strength. Boom articulation is from horizontal to 15 degrees past vertical. Articulation is achieved by using two double-acting cylinders. Each cylinder is capable of supporting the entire rated load by itself and is equipped with two integral holding valves. In the event of a hydraulic failure the integral holding valves prevent the booms from dropping by locking the booms in position. In addition the cylinder rod eyes are both threaded and welded.

STATE ALL EXCEPTIONS: _____

4. LOWER BOOM OVERSTOW PROTECTION

The aerial lift is equipped with hydraulic overstay valve to limit the descending force and impact of the lower boom with the lower boom rest during stowing operations. This prevents damage to the lower boom fiberglass insert, the lower boom rest, and the vehicle chassis from improper stowing.

STATE ALL EXCEPTIONS: _____

5. ENGINE START/STOP CONTROL

The start/stop circuit has been designed so that the lift cannot be operated unless the truck ignition is in the "run" position and the master control switch is "on". This feature makes it difficult for unauthorized individuals to operate the lift when the truck is locked. An air cylinder at the upper controls is used to energize this system at the platform. A weatherproof toggle switch at the lower controls shall be provided to activate start/stop system.

6. THROTTLE CONTROLS

Automatic flow sensing throttle for aerial tower operation, flow sensing system raises engine speed to preset RPM for proper aerial tower operation.

7. CHASSIS INSULATING SYSTEM (LOWER BOOM INSERT)

Each end of a high strength filament-wound oven based epoxy resin fiberglass insert is slid over a steel section until the fiberglass butts up against the mechanical stop welded on each steel section. When the insert is snugged up between both stops it is positioned correctly. The fiberglass insert maintains a 24" insulation gap between the two steel sections. Then the steel and fiberglass sections are bonded with pressure injected adhesive, which fills all the voids. After the adhesive cures, 32 bolts are installed to assure maximum strength. A stainless steel stud is supplied at each end of the insert to shunt the chassis insulating system during electrical testing.

STATE ALL EXCEPTIONS: _____

8. INSULATED UPPER BOOM

The rectangular upper boom tapers from 8" x 12" at the knuckle end to 8" x 10", inside dimension, at the platform end and is constructed of high strength filament wound epoxy resin fiberglass. The fiberglass has a gel coat and a high gloss durable urethane finish for added weather protection and water beading. At each end of the boom a steel weldment is mounted to the fiberglass, then adhesive is pumped in under pressure to fill all voids. After curing, 24 bolts are installed to assure maximum strength. The fiberglass boom is certified for 46kV and below in accordance with Category "C", ANSI A92.2-2015.

Inside of all fiberglass boom sections are to be coated with clear urethane finish to protect inner surface. The upper boom electrical insulation gap to be a minimum of 239 inches.

The upper boom articulates 70 degrees above horizontal or a total of 175 degrees relative to the lower boom. A compensating system maintains the upper boom at a constant angle when raising the lower boom and mechanically prevents the upper boom from traveling overcenter. The system does not use any cables and the booms can be stowed in any sequence. An upper boom storage cradle mounted on the lower boom assures solid boom support in the stowed position.

A hydraulic operated boom latch to secure the upper boom for road travel is to be provided. Assembly to be compact in size and not impede use of unit in parts of the assembly protruding in any way away from the confines of the latch assembly.

For the lower boom provide a bracket on the lower boom rest along with a lower boom pinning pin and provide a detented pin to hold the lower boom in place for road travel. Provide a lanyard to the detented pin to the boom rest area to keep the pin in this area when removed.

The upper boom movements during operating of the lower boom will be in a horizontal motion front or back without any upward or downward movements in a vertical plane. This is to be a coordinated action using compensating mechanical linkage without cables or chains. **NO EXCEPTIONS TO THIS WILL BE ALLOWED.**

9. VACUUM PREVENTION SYSTEM

All hydraulic lines to platform will have vacuum prevention check valves or atmospheric vents to protect against vacuum flashover.

10. TURRET

Turret wings are made of solid plate 1 1/4" thick. The bearing cover is continuous welded to seal out moisture and prevent foreign materials from obstructing the turret's rotation. The turret base plate is machined to provide a flat surface to support the rotation bearing.

11. CONTINUOUS ROTATION

Rotation is continuous and unrestricted in either direction. This is accomplished by a hydraulically driven worm and spur gear acting on a shear ball rotation bearing. The critical bolts holding the lift to the rotation bearing and the rotation bearing to the pedestal are SAE Grade 8.

These critical bolts are marked with a torque seal indicator to provide a quick means of detecting any loosening upon inspection. An eccentric ring gearbox mounting allows for precise adjustments of the gearbox pinion clearance.

STATE ALL EXCEPTIONS: _____

12. LUBRICATION

Non-lube bearings are used at all points of boom motion. Only the rotation bearing and leveling chain require periodic lubrication.

13. PEDESTAL

The rear mount pedestal is a fabricated steel structure and includes a full length subframe and mounting hardware for mounting over the rear axle. The pedestal is welded to the subframe and the subframe is bolted to the chassis frame. A combination of long bolts that clamp the full depth of the frame and shear plates attached to the subframe are used to mount the subframe to the chassis frame. The pedestal mounting hardware is a long bolt system which clamps the full depth of the frame. Unit to include a 12" riser. The hydraulic oil reservoir is built integral to the pedestal. The top plate of the pedestal is 1 1/4" thick and machined flat to support the rotation bearing.

STATE ALL EXCEPTIONS: _____

14. OUTRIGGERS

Four A-frame outriggers are connected to the pedestal and the front end of the subframe. The front outriggers shall mount between the body and the cab. Each are equipped complete with pilot-operated check valves, internal thermal relief valves and separate operating controls for each outrigger. At maximum extension, the outriggers provide 150" of spread and a maximum of 7" of penetration based on a 36" frame height.

STATE ALL EXCEPTIONS: _____

15. OUTRIGGER/BOOM INTERLOCK SYSTEM

The outrigger/boom interlock option is a feature designed to prevent the lift from being operated until the **outriggers make firm contact with the ground.** The interlock also prevents the outriggers from being retracted before the aerial lift is properly stored.

16. OUTRIGGER/BOOM WARNING DEVICES

Outrigger sag light to be provided to indicate if any of the outriggers are not completely stored prior to road travel. Provide a flashing red light in overhead console with label. Label to be illuminated from behind for night work.

Outrigger alarm system for alerting crew to outrigger operation with audible alarm. This is to be provided for operation of all four outriggers.

Boom out of rest light for indicating lower boom has been stored into boom rest. Provide a flashing red light in overhead console with label. Label to be illuminated from behind for night work.

STATE ALL EXCEPTIONS: _____

17. INCLINOMETERS

Inclinometers are to be provided per ANSI A92.2-2015 requirements, provide a quantity of two (2) and place these in view of the operators for use at unit set up.

18. PTO

10 bolt hot shift PTO transmission mounted with illuminated rocker switch in the overhead console for activation. A flashing light

shall be provided in the overhead console to indicate activation.

19. HYDRAULIC SYSTEM

The closed-center hydraulic system operates at 2250 PSI at 8 GPM. A variable volume pressure compensated pump controls system pressure and flow. A 10 micron return line filter is mounted above the hydraulic oil level and inside the pedestal. The return line filter can be easily changed without draining the reservoir. A filter gauge with a color-coded range is used to monitor the condition of the return line filter for replacement. The suction screen inside the tank has a 100 mesh rating and can be removed for cleaning.

Located below the reservoir is a gate valve to prevent oil loss when the pump is serviced. A magnetic drain plug is used to attract and collect any metallic contamination in the reservoir. Hydraulic oil is Tellus T-22.

STATE SYSTEM OPERATING PRESSURE: _____

20. HYDRAULIC OIL RESERVOIR

Designed as an integral part of the pedestal, the reservoir has anti-splash baffles, a return line filter gauge and easy to read fluid level gauges. The hydraulic oil capacity in the reservoir is 25 gallons.

Heavy duty SAE 10 bolt power take off for use with flange mounted hydraulic pump. To include hot shift activation with indicator light, both mounted in overhead console.

STATE ALL EXCEPTIONS: _____

21. CYLINDERS

Both the upper and lower boom cylinders are the threaded end cap design. The lower boom cylinders are equipped with two integral holding valves to prevent down creep of the booms and to lock the booms in position in the event of a hydraulic failure. The upper boom cylinder is equipped with both a subplate mounted holding valve and an adjustable flow control valve. The upper boom cylinder is totally enclosed within the lower boom.

STATE ALL EXCEPTIONS: _____

22. HYDRAULIC TOOLS

This system is designed to use closed center hydraulic tools. The tool circuit provides 6 1/2 GPM at 2000 PSI. Two sets of hydraulic tool ports with shut off valves (two pressure ports and two return ports), with a selector to choose tool to be used at the platform.

One set of hydraulic tool outlets with shut off valves to be provided at curbside rear of chassis. Selector valve to be included for tool operation. **Provide three (3) sets of Parker NS-370 or exact equal quick couplers with dust covers, two at basket and one set rear tool outlets.**

STATE ALL EXCEPTIONS: _____

23. CONTROL VALVES

Full pressure control valves at the platform and the turret control the following lift functions: rotation, upper boom and lower boom movements. The Non-conductive handle single stick with safety trigger shall be provided at the platform control.

Upper control isolation system to protect operator from electrical contact of the upper boom end to the control console.

The lower controls are multi-lever and are equipped with a control selector valve to override the upper controls.

The outriggers are operated by separate control valves, which are located with the ground controls, located at the rear of the vehicle. Two controls each side for viewing outrigger operation.

24. HOSES AND FITTINGS

The hoses routed through the booms are high pressure, non-conductive hoses with swaged hose end fittings. Precautions are taken where hoses might chafe or rub. For example, retainers are used to separate the hoses inside the booms to prevent chafing. Nylon sleeves are installed over hoses at points of movement.

25. PLATFORM CONTROLS

The metal single stick lever is a full pressure control with a built-in safety trigger, which must be activated before any lift function can be operated. Designed as an extension of the operator's arm and hand, the single stick lever offers finely

controlled boom movements that correspond to the direction the handle is moved. The safety trigger selects lift functions when released to its normal position. An emergency hydraulic stop valve in addition to the safety trigger is to be provided. **Pilot operated type controls are unacceptable.**

Upper control isolation system to protect operator from electrical contact of the upper boom end to the control console.

STATE TYPE OF CONTROL SYSTEM PROVIDED: _____

26. ELECTRICAL INSULATION SPECIFICATION

The upper boom is tested and certified for electrical work at 46kV and below in accordance with Category "C", ANSI A92.2-2015 requirements. The chassis insulating system (lower boom insert) is also tested according to ANSI A92.2-2015. Vacuum prevention for all the hydraulic hoses routed through the insulated booms are standard.

27. MANUALS

Two (2) operator's and **two (2)** service manuals are included with unit. (See General Provisions, Item #18 - Service Manuals CD/DVD/Keys).

Provide manual holder box in cab to store aerial tower manuals.

28. PLATFORM LINER

A 24" x 42" x 42" platform liner with molded step in corner is provided. The liner is tested and rated for 50kV AC.

Platform liner scuff pad for 24" x 42" 50kV liner.

29. PLATFORM COVER

Foam filled cover for a 24" x 42" basket with lanyard for added security.

30. FALL PROTECTION

Provide quantity of two; **flame retardant** full body harness with **flame retardant** shock absorbing lanyards, large size.

31. ELECTRICAL

Wired-Rite or approved equivalent electrical relay system features a color coded wire harness with double positive, environmentally

sealed connectors. Unit to include a centralized console installed overhead in cab. Console features illuminated switches and illuminated legends that provides easy access with clear visibility for operator.

Provide four amber LED safety lights 360 degree illumination, North American Brand Model LED400HD, two at front of cab guard, and the other two at the rear of body on top of the box lids. Illuminated rocker switch activation to be in overhead console. Tops of strobes are to be blacked out. Lights to have flat bar guards to prevent damage.

Provide Whelan Dominator Series Two 14" amber LED arrow stick light mounts one on each side of rear panel of utility body with directional control box in cabs. Provide a 1/4" flat bar guard arrow stick unit, complete 360 degree and depth, one per side.

32. EMERGENCY POWER

This system consists of a hydraulic pump driven by a DC motor, which is powered by the truck's engine battery. The system is connected in parallel with the main pump and is designed for non-continuous operation. An air cylinder at the upper controls is used to energize this system. An additional pass in the collector assembly is provided. Also provide separate activation switch (weatherproof) at lower controls to operate emergency power at lower controls.

Install hour meter for PTO operation in side of overhead console.

33. PAINT

The complete unit is primed and painted prior to assembly. The standard color is chassis OEM color of white polyurethane.

34. WELDING

All welding performed on the unit must be done by welders who are certified under the latest revision of ANSI A92.1969.

BODY SPECIFICATIONS

Placement of all body items shall be approved by the City of Newark prior to construction by vendor providing a CAD drawing.

1. BASIC BODY

The entire unit shall be constructed of 16 gauge A-60 galvanneal steel. Doors shall be double paneled, and constructed of 18 gauge

A-60 galvanneal steel. Body crossmembers shall be of 5" structural steel. It is to be welded and riveted throughout so as to constitute a single unit. All welding shall be accomplished in accordance with good commercial practice, and all welds shall be thoroughly sanded to insure a satisfactory appearance to the finished product. Basic body shall be in prime paint.

All sheared edges of the bulkheads and side paneling, including door openings, shall have lapped or rolled edges. The door flanges shall be formed in this way and not welded to the body structure. The forward position of all door openings shall have water guards to keep rain water out while truck is moving forward. The hinge rods shall be stainless steel, and be installed in bronze hinge bosses at the end of the door openings. All horizontal doors shall open 180 degrees with rubber doorstops. All door openings shall be designed with a built in trough to carry water away that may get past front edge molding. All doors shall be provided with stainless steel flush type door handles, single point strikers, and cylinder locks. Locks shall be riveted into place for easy installation. All locks shall be keyed alike. Exterior paneling of all doors shall be free of excessive waves of welding marks in the metal. Compartment tops to be covered with 12 gauge galvanneal tread plate the full length of the body. Wheelhousings to be made of 14 gauge A-60 galvanneal and equipped with rubber fenderettes.

2. BODY DIMENSION

The dimensions shall be 168" long, 92" wide, 48" high and designed to fit a chassis having 130" cab to axle dimension. Also to include a 26" platform extension. Side compartment depths to be 18".

3. CURBSIDE COMPARTMENT

Front vertical compartment shall be approximately 24" wide and 18" deep by 48" high. Compartment interior shall include one fixed shelf for inverter, then a fixed shelf below the inverter mounting location for placement of battery chargers for rechargeable tools.

Curbside entrance opening between front and third vertical compartment. Opening will be 20" wide, and has grip strut steps and grab handles. Grip Strut rubber hung stirrup step under side access is to be provided, full width of opening. There will be a location for the inverter batteries with a lift up step assembly.

The battery location area shall be coated with spray on bed liner material.

Second vertical compartment shall be approximately 24" wide and 18" deep by 48" high, and to have one shelf with three slide out drawers beneath shelf mounted on stainless steel slides with positive latch to hold drawers closed.

Third vertical compartment shall be 24" wide and 18" deep by 48" high and to have three adjustable shelves with adjustable dividers.

One (1) center horizontal compartment shall be 50" wide and 18" deep over wheel well to be ventilated, fixed shelf upper portion with dividers and a full length removable parts tray in bottom. Fixed dividers 50" in length shall be installed to allow storage of bolts over 18" long.

Rear vertical compartment shall be 26" wide and 18" deep by 48" high. Shelf in upper portion extends from horizontal compartment with lower portion having a water cask stand with drain to outside of compartment. In lower portion provide hook cluster in 1-3-1 pattern.

4. STREETSIDE COMPARTMENT

Front vertical compartment shall be 24" wide and 18" deep by 48" high. Compartment interior shall include three shelves with adjustable dividers.

Second vertical compartment shall be 20" wide and 18" deep by 48" high. Inside compartment to have three adjustable shelves with adjustable dividers.

Third vertical compartment shall be 24" wide and 18" deep and 48" high. Inside compartment to have three adjustable shelves with adjustable dividers.

Fourth vertical compartment shall be 24" wide and 18" deep by 48" high. Inside compartment to have three adjustable shelves with adjustable dividers.

One center horizontal compartment over wheelhousing shall be 50" wide and 18" deep. Inside compartment to have one full length shelf with plywood bottom in upper portion, and bottom to have removable parts tray. Fixed dividers 50" in length shall be installed to allow storage of bolts over 18" long.

Streetside compartments shall have a plywood lined full length long hot stick storage with a door opening 13" x 8" at rear of body.

Rear compartment shall be 26" wide and 18" deep by 48" high and to include a hook cluster in a 1-3-1 pattern, bolted as high as possible.

5. BASIC BODY TO INCLUDE

26" platform extension at rear of body built of 1/8" diamond safety treadplate and thru tunnel with door at each end. A single door to access thru tunnel and the storage compartments shall be provided on each side.

Thru tunnel to be 5" high and full width.

Diamond safety tread steel floor, 1/8" thick.

Cutout for outriggers in rear compartments with galvanneal steel guards.

1" pipe grab handle at left corner of tailshelf, inverted "U" type.

Tailshelf access steps, built into rear of tailshelf at each side, integral to the tailshelf storage compartments. Steps to be gripstrut type treads.

Grab handles and rubber hung stirrup step at side access step to load area of body.

Galvanneal treadplate shall be the top of side compartments.

DOT FMVSS 108 LED lighting package. Rear lights to be grommet mounted in channel of tailshelf. Provide LED type lamps on all red and amber color lights, backup lamps to be LED.

Mud flaps installed at rear of body.

Wheel chock holders built into body wheelwell panels with retainer.

Door hinges to be full length.

Door mullions for replaceable door seals.

All doors shall have stainless steel paddle type handle latches with weather protected cylinder locks, keyed alike, bolted in place. Not welded.

Gas Prop door holders to hold vertical doors at 90-degree angle in open position.

Horizontal doors to have coated cable retainers to hold horizontal.

Automotive door seals (replaceable). Glue-on not acceptable.

All doors shall be double paneled with outer panel constructed of 18-gauge A-60 galvaneal steel.

Body shall be completely prime painted and installed on chassis.

Both sides of body to have full length locking bar device.

All body lighting electrical system to originate at chassis manufacturer's body builders junction block, located in cab.

6. ACCESSORIES

Model T-100 heavy-duty pintle hook, rear crossmember and bracing.
NOTE: Pintle hook throat height to be 24" to 28" on finished unit.

Dimensions 2400-watt pure-sine wave power inverter with one AGM deep cycle supply and required circuit tie into chassis. Four 110-volt GFI outlets mounted in heavy-duty metal box and weatherproof-hinged cover at each corner of the body. Mount inverter in the right front body compartment at the top and provide a louver in the upper area of the compartment for ventilation. Battery to be mounted between the lower boom rest uprights on a shelf plate, secure and mounted into protective metal case with proper venting. Inverter to be activated through the chassis ignition key for operations or shutdown.

Provide Wire Mold 6 outlet power strip in the inverter compartment on the shelf designated for the rechargeable tools, this is to be wired to the inverter for operation.

Safety chain anchors 5/8" "U" bolt style, welded.

Cole-Hearse 6 way trailer electrical socket, round terminals.

Cole-Hearse 7 way trailer electrical socket, round terminals.
(Want both 6 pin and 7 pin)

EPCO Model 500-PS electronic solid state brake controller. Two heavy duty dock bumpers mounted at rear of unit.

Unit to have vertical exhaust on passenger's side with shield. Alter cab guard and accessories to allow exhaust to extend above cab guard. **Provide 90 degree elbow** on top of stack. Any flex pipe used to be stainless steel.

Shield single truck exhaust against oil spray due to failure of hydraulic components and to protect hoses from exhaust heat.

Rustproofing and undercoating applied to entire body, tailshelf and related components with 5 year limited warranty certificate furnished.

One pair heavy duty wheel chocks (rubber).

Paint gray ferrox non-skid across full length of body, top boxes and tailshelf.

Body to have rubber fenderettes over each wheel.

Rear basket access steps made of Grip-strut. Curbside step assembly to have staircase effect type steps a minimum of **twenty-two (22)** inches wide from tailshelf to top rear of rubber goods box. A 1" pipe safety/assist rail inner and outer shall be provided on the basket access steps. The outer assist handle shall be full length from the tailshelf to the **top** of the rubber goods box area to protect the operator during all movements to and from the basket.

Full width cab protector for tilt hood chassis. Cab guard to be a spring floating mount to allow movement. Cab guard to be made of 2" square tubing frame and uprights with heavy duty expanded metal walking surface. Front bumper is to be spaced away from standard location to allow tilt motion of the tilt front end through the cab guard uprights. A diamond plate panel is to be installed between bumper and fiberglass front end.

Boom rest at front to be integral to the front cross structure of the cab guard with padded saddle for boom placement when stowed.

Provide two cut outs in front bumper extension panel for cone holders. To be at each end and be approximately an 11" round cutout.

Paint cab guard assembly, front bumper assembly and related accessories in this area gloss black.

Provide Igloo water cask P.N. 351 with P.N. 9758 bracket - ship loose.

Four outrigger pad storage holders with retainer. Place one on each holder adjustment to each outrigger.

Four 18" x 18" x 2" wood outrigger pads with handles.

Install replaceable automotive type door seals on all compartment doors.

Rubber goods storage box curbside box to be 124" long by 18" wide by 12" high on the section aft on the side cargo access steps, full length of the compartment top with a two piece lid. All boxes to have louvered vents, plywood lined on all sides, lids to have lift assist handles, all lids to have spring hasps to secure. Box openings at tops are to have upright flange to prevent water passage into boxes. Box lids to be diamond plate with **stainless steel hinges**, all lids to be supported by gas struts to hold open. At the rear top portion of the box the lid is to stop approximately 12" from end then there will be a grip strut area on top of box in this area for basket access. Note: Offset rear section to accommodate the platform access landing will be acceptable.

Cross arm storage area under right side top storage box, to be full length and width of the compartment top. The outer side and front to be enclosed. The cargo side and rear side accessible for loading/unloading cross arms, there shall be a retainer 1" lip on the open two sides. The inner height shall be 8" tall.

Streetside top storage box curbside box to 178" long by 24" wide by 18" high on the section aft the side cargo access steps, full length of the compartment top with a two piece lid. All boxes to have louvered vents, plywood lined on all sides, lids to have lift assist handles, all lids to have spring hasps to secure. Box openings at tops are to have upright flange to prevent water passage into boxes. Box lids to be diamond plate with stainless steel hinges, all lids to be supported by gas struts to hold open. NOTE: Adjust body side packs height to work with the top storage box and then the ladder storage box.

Ladder storage box in left side of body load area to be 8" wide by 24" high and full length of load area. To have roller at rear and securing device. Front section to have sliding door clean out and large drain holes in the bottom.

50 foot grounding cable assembly with three point contact, aerial tower, body and chassis. To have 50 feet of usable cable with grounding clamp. Storage bracket to be at the left side of the basket access steps on the first step.

Material rails with sliding hooks are to be as follows: Streetside: On the streetside of the cargo area at front the rail is to be mounted on two vertical channels and be 6' long and have eight (8) sliding hooks. Adjust the location to be aft the cargo flood storage box, this would be located rearward. Mounted on the

cargo side of the rubber goods box as high as possible.

Curbside cargo area: Two sets - one set up as high as possible mounted to the rubber goods box, there are to be two rails mounted curbside, three (3) feet long mounted at the front and rear top of the rubber goods box with four (4) hooks each. A second set of material rails are to be provided immediately under the cross arm storage area opening towards the cargo area, Quantity - 2 each 36" long with four (4) hooks each.

Material rail bar on the rear side of the lower boom rest to be provided, width of the boom rest for material storage.

Front cargo area storage box on body floor aft the body bulkhead, to be width of available cargo floor area x 18" tall x 20" deep. There shall be a lift up lid made of treadplate steel with door seals and hasp type latch. Box is to have punched vents towards the rear, complete inside walls and floor of the box to be plywood lined. Apply non skid paint to the lid for safe stepping/walking surface.

Rear window guard to be made from punched galvanized steel and mount to cab guard uprights.

Complete priming and painting of body, aerial device and accessories one standard color. Interior to be gray speckled paint. Body, cab and cab protector color to match. Finish color of body exterior to be cab chassis OEM white in urethane type paint.

Fire extinguisher 10 lb. type B & C with bracket. Ansul Sentry P.N. SY1014, shipped loose.

First aid kit with holder.

D.O.T. triangle road reflector kit.

Overall height engraved placard on dash with 1/2" letters.

Certified weight slip with fuel tanks full, showing front axle, rear axle and complete unit weights. To be in aerial device manuals.

Shield chassis exhaust due to hydraulic spray and excessive heat exposure to hydraulic lines.

Swivel type heavy duty vise 6 1/2" wide jaw with removable holder on tailshelf, Wilton 1765 or equal. Bracket shall slide onto tailshelf lip with wingbolt to secure.

Go-Light LED equivalent to the Model 3067 remote control motorized light mounted on right **front** of cab guard. Motion of light to be remote controlled with wireless controller. Light to have up/down and right/left motions that provides operator to control from any location in the proximity of the unit. Provide a removable expanded metal guard to protect the light.

Body compartments are to each have a LED type rope lights inside on the entire perimeter to illuminate compartment for night work. Lights on vertical compartments shall mount on body doors to provide optimum illumination. Electrical tie into 12 VDC system shall be through the parking light circuit of the cab chassis feeding a relay that provides power to the compartment lights. The relay shall be part of the centralized electrical system.

Provide **ten (10)** keys for body door locks.

All body and tailshelf doors to be keyed alike for ease of use.

CAB AND CHASSIS SPECIFICATIONS

2016 Model Year Freightliner M2-106 or International 4400 series Truck Chassis which conforms to the following specifications:

	<u>YES</u>	<u>NO</u>	<u>BIDDER'S ALTERNATE</u>
• GVWR: 37,000 lbs./GCWR: 61,000 lbs.	_____	_____	_____
• Cab to axle: approximately 130" - CLEAR	_____	_____	_____
• 300 HP minimum Cummins ISB6.7 Series diesel engine, 750 lb./ft. torque electronic engine. HPCR fuel management system with remote throttle tie in for installation of aerial tower two speed throttle	_____	_____	_____
• Engine aspiration: VGT Turbocharged	_____	_____	_____
• Engine oil cooler: Integral in block	_____	_____	_____
• HEATED Fuel-water separator	_____	_____	_____
• Transmission: Allison New World 3000RDS 5-speed automatic with push button dash mounted shifter, with PTO gear and less retarder, factory filled with Allison Transynd fluid.	_____	_____	_____

	<u>YES</u>	<u>NO</u>	<u>BIDDER'S ALTERNATE</u>
• Front axle: 14,000 lbs. (GAWR)	—	—	—
• Rear axle: 23,000 lbs. (GAWR) single-speed	—	—	—
• Front suspension: 14,000 lbs. with shock absorbers	—	—	—
• Rear suspension: 23,500 lbs. multi-leaf with 4500 auxiliary springs	—	—	—
• Rear axle ratio: geared to 60 - 65 mph	—	—	—
• Tires: 11R22.5G(14PR) front highway tread, rear traction tread	—	—	—
• Wheels: 22.5 x 8.25" 10-hole disc wheels	—	—	—
• Frame: straight channel side rail, 120,000 psi yield strength with "C" channel reinforcement	—	—	—
• RBM: 3,806,400 minimum and section modulus of 31.72	—	—	—
• Air tanks: located to leave outside of frame clean behind cab	—	—	—
• Brakes: ABS dual air brake system with automatic slack adjusters	—	—	—
• Parking brakes: spring-applied with dash mounted control (chamber located forward of rear axle)	—	—	—
• Air compressor: 13.2 CFM	—	—	—
• Moisture ejector: on wet tank with heater	—	—	—
• Heated air dryer	—	—	—
• Front bumper: 10.25 x .25" steel channel with swept-back ends and openings for two hooks	—	—	—
• Tow hooks: two (2) front frame mounted	—	—	—
• Cooling: heavy-duty with Horton Drivemaster two speed fan and coolant recovery (surge) tank	—	—	—
• Anti-freeze: all season coolant protection to -20F with Long life coolant	—	—	—
• Magnetic drain plugs: engine, transmission and rear axle	—	—	—
• Lubricants: synthetic for front and rear axles	—	—	—
• Steering: Ross power with gear-driven pump and collapsible energy absorbing	—	—	—
• Tilt steering wheel	—	—	—

	<u>YES</u>	<u>NO</u>	<u>BIDDER'S ALTERNATE</u>
• Exhaust: Right side with vertical stack and 90 degree tip - vertical. Chassis must meet current emissions. Diesel particulate trap must be mounted under the cab on the passenger side. No exceptions.	_____	_____	_____
• 50 gallon aluminum LH fuel step tank with non skid top tread plate, sump and drain plug	_____	_____	_____
• Air cleaner: dry element with filter reminder gauge	_____	_____	_____
• PTO opening on the transmission	_____	_____	_____
• Hood to be a three piece design tilt hood, with engine access driver's side. All fluids must be able to be checked with the hood in the down position.	_____	_____	_____
• Padded dash, dual arm rests, dual padded sun visors, exterior locks on both doors	_____	_____	_____
• Heater/defroster/AC package. AC to have automatic shutdown if there is a failure to the system	_____	_____	_____
• Dome lamp with door switches and dash switch	_____	_____	_____
• Interior assist handles, both sides to be safety yellow	_____	_____	_____
• HD vinyl bench seat with folding back	_____	_____	_____
• Seat belts, three sets, two with retractors, shoulder harnesses and one lapbelt in center	_____	_____	_____
• Gauges: speedometer, tachometer, hourmeter, odometer, coolant temperature, fuel level, oil and air pressures, voltmeter	_____	_____	_____
• Dual electric horns	_____	_____	_____
• 3 batteries, 1850 CCA with jumpstart terminals. MOUNTED UNDER CAB	_____	_____	_____
• Alternator: 200 amp brushless	_____	_____	_____
• Dual powder coated west coast heated mirrors with convex on both sides	_____	_____	_____
• 12 volt electrical system, HD flasher, HD hazard flasher switch	_____	_____	_____
• Circuit breakers in fuse panel - (less 5 amp fuses)	_____	_____	_____
• Ashtray with cigarette lighter	_____	_____	_____

	<u>YES</u>	<u>NO</u>	<u>BIDDER'S ALTERNATE</u>
• Intermittent wipers with washer	_____	_____	_____
• AM/FM stereo radio with clock	_____	_____	_____
• Paint to be manufacturer's white	_____	_____	_____
• All season climate control	_____	_____	_____
• Back up alarm	_____	_____	_____
• Provide five (5) sets of keys for cab-chassis	_____	_____	_____
• Truck chassis OEM Upfitter switches Provide quantity of 8 switches for Feature	_____	_____	_____

CITY OF NEWARK
Delaware

CONTRACT NO. 16-03

PURCHASE OF ONE 55' AERIAL LIFT,

UTILITY BODY AND CHASSIS

BIDDER'S PROPOSED SPECIFICATIONS

One New 55' Aerial Lift, Utility Body and Chassis:

Truck Chassis Make and Model No _____

Utility Body Make and Model No. _____

Aerial Lift Make and Model No. _____

Aerial Lift Specifications _____

Lift height to bottom of basket _____

Working height _____

Horizontal reach _____

Stowed travel height _____

Rated capacity of bucket in all positions _____

Upper boom arc of travel _____

Lower boom arc of travel _____

Lower boom metal to metal separation _____

Hydraulic system operating pressure _____

Aerial Lift Safety Items (Yes or No) _____

Interlock system preventing accidental
operation of either upper or lower
controls _____

Outrigger/boom interlock system to
prevent tower operation unless
outriggers are lowered _____

Outrigger downward motion alarm _____

Check and/or atmospheric vent
valves to prevent vacuum buildup _____

Certified ANSI Category "C" _____

Upper and lower boom tie downs _____

24" lower boom insert _____

Aerial device manufactured in an
ISO9001 certified facility _____

Nearest service center for parts and service. State distance from
City. Successful bidder to have authorized service center within
sixty (60) miles of the City of Newark _____

Bidders may be required to furnish a similar truck as a demo
within two weeks of a request by the City before award of
contract.

EXCEPTIONS: _____

CITY OF NEWARK
Delaware

CONTRACT NO. 16-03

PURCHASE OF ONE NEW 55' AERIAL LIFT,

UTILITY BODY AND CHASSIS

PROPOSAL

TO: The Mayor and City Council
Newark, Delaware

FROM: _____

The undersigned as a lawfully authorized agent for the below named Bidder has carefully examined the General Provision, Specifications, and Proposal to be known as Contract 16-03, and binds himself upon award to him by the Mayor and City Council of Newark, Delaware to execute in accordance with such award, a contract of which contract this Proposal and said General Provisions and any Addenda shall be a part, and to furnish the equipment as specified F.O.B. Newark, Delaware in a manner that is in complete accordance with said General Provisions and Specifications, at the following named prices for the items:

BID PRICE

One new 55' Aerial Lift,
Utility Body and Chassis _____

Minus Trade-in Allowance _____

One (1) one 2003 International Model 4300 Chassis with Versalift
VN-55-I Boom Serial Number GA030002

NEW BID PRICE _____

Delivery Date _____

To arrange an appointment to examine the trade-in vehicle, call
Mr. Rick Vitelli at 302-366-7000 x 2080.

Exceptions: _____

Date _____ Bidder/Contractor _____
BY: _____
Its legally authorized representative
TITLE: _____
STREET ADDRESS: _____
CITY, STATE, ZIP: _____
TELEPHONE: _____

CITY OF NEWARK
Delaware

CONTRACT NO. 16-03

PURCHASE OF ONE NEW 55' AERIAL LIFT,

UTILITY BODY AND CHASSIS

BOND TO ACCOMPANY PROPOSAL

(not necessary if certified or cashier's check is used)

KNOW ALL MEN BY THESE PRESENTS THAT _____ of
_____ of the County of _____ and
State of _____, principal, and
_____ of _____ as
surety, legally authorized to do business in the State of
Delaware, are held and firmly bound unto the City of Newark in the
sum of _____ Dollars, to be paid to
said City of Newark for use and benefit of the Mayor and Council
of Newark, for which payment well and truly to be made, we do bind
ourselves, our and each of our heirs, executors, administrators
and successors, jointly and severally, for and in the whole,
firmly by these presents. Sealed with our seal dated the
_____ day of _____ in the year of our Lord, two
thousand and sixteen (2016).

NOW THE CONDITIONS OF THIS OBLIGATIONS IS SUCH, that if the
above bounded principal who has submitted to said City of Newark,
a certain proposal to enter into a certain Contract No. 16-03,
Purchase Of One New 55' Aerial Lift, Utility Body and Chassis, and
if said _____ shall well and truly enter into

and executes said contract and furnish therewith such Surety Bond or Bonds as may be required by the terms of said contract and approved by said City of Newark, said Contract, and said Bond to be entered into within ten (10) days after the date of official notice of award thereof in accordance with the terms of said proposal, then this obligation to be void, otherwise shall remain in full force and virtue.

SIGNED AND SEALED IN THE
PRESENCE OF WITNESS:

SIGNED _____ (SEAL)

BY _____ (SEAL)

SIGNED _____ (SEAL)

BY _____ (SEAL)